

STATE OF NEVADA
OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES

Solicitation to Furnish
Inundation Mapping
for a Nevada Dam

Project Specifications and Instructions for
Submittal of a Response

Jason King, P.E., State Engineer

Instructions to Consultants

The Division of Water Resources must receive written responses by 5:00 PM, March 16, 2012.

Please submit three (3) copies of your response to:

Bonnie Kordonowy
Nevada Division of Water Resources
901 South Stewart Street, Suite 2002
Carson City, Nevada 89706
(775) 684-2800

Please direct all questions pertaining to this **solicitation** to Bonnie Kordonowy at the above listed number or via e-mail at bkordonowy@water.nv.gov on or before 5:00 PM, March 9, 2012. All materials submitted in accordance with the response guidelines become the property of the Division of Water Resources and will not be returned.

The work to be provided consists of generation of an Inundation Map Set for a dam in Nevada. The successful contractor shall furnish Inundation Maps sufficient for use in an Emergency Action Plan to the dam owner. The deliverables shall include, in addition to the Inundation Maps, a copy of the model used to generate flood parameters, elevation datasets for the potential inundation zone including base data and flood elevation data and the model output, including the flood hydrographs. Conditions to be modeled include Maximum Operational (Outlet and Service Spillway) Release, Maximum Emergency Spillway (Fuse Plug) Release and Dam Break. Terrain elevation interval is to be not greater than three feet (3') or one meter (1m), where potential impacts are expected. A greater interval may be allowed in other areas. A 2-D model will be necessary to adequately model the dam breach. The results of the model must be broad enough to adequately address all areas of potential impacts.

Each response shall include the following items:

1. Consultant's experience (within the prior five (5) years) with similar mapping projects. Please provide a reference name and telephone number for each project listed and one copy of an EAP inundation map set prepared or updated by the consultant.
2. Education and similar past experience of the consultant's staff who will be assigned to this project, including the name and license number of the professional engineer in charge of the project.
3. A preliminary manpower outline (including an estimate of the number of man-hours) and a listing of your firm's technical equipment to support this effort.

4. Your approach to establishing the field, investigative, modeling, map preparation and revision schedule including a list of other major projects that are utilizing your firm's resources and an estimate of time to complete the project.
5. Your familiarity with dam EAP process and formats, especial that described in that document known as "Emergency Action Planning for Dam Owners" (FEMA 64).
6. Your approach to Inundation Mapping. Identify potential complications or difficulties that may be encountered in the implementation of these services and suggested resolutions.

The written response shall be limited by the following:

1. Presentation for items (1), (4) and (5) shall be limited to two (2) double-spaced, single sided 8 ½ "x 11" pages for each item. Items (2) and (3) must be single sided 8 ½ "x 11" pages but have no spacing requirement or page limit.
2. Supply information on personnel and equipment to be used on this project only.
3. Current organizational chart.

Selection will be based on evaluations of the factors shown on the evaluation chart (attached) from the written response(s) to arrive at a final evaluation. The firms will be ranked with negotiations for compensation and consultant agreement conducted following selection of the consultant. If an acceptable agreement cannot be reached with the initial consultant selected, the State Engineer will proceed to negotiate with the next most qualified firm and so on, until an acceptable agreement is reached.

With this solicitation, the consultant is furnished a link to an on-line copy of the draft contract. Compensation shall be on a cost per unit of work performed with a unit of work defined as submittal of completed inundation maps and supporting documentation to this office, unless otherwise negotiated.

Attachments:

Inundation Map Set deliverables

Consultant evaluation form

Instructions for viewing or downloading a sample contract

Inundation Map Set deliverables:

1. Inundation Map Set shall be in conformance to the standard format suggested by the State Engineer as outlined in that publication known as “Emergency Action Planning for Dam Owners” (FEMA 64). Major components shall include, but not be limited to:
 - a. Inundation limits.
 - b. Flood wave arrival time.
 - c. Maximum flood depth.
 - d. Maximum flood velocity.
 - e. Structures and major facilities potentially affected.
2. Inundation Map Set shall be produced in a manner that allows easy reading and reference and that may remain legible and understandable when copied in black and white.
3. Copies of the developed dam break and flood propagation models.
4. Copies of any elevation data, mapping or survey utilized in the development of the models or Inundation Map Set.

CONSULTANT EVALUATION FORM

Project Description: Nevada Dam Inundation Map Set Date: _____

CONSULTANT: _____

Does the consultant have a Nevada licensed professional engineer slated for assignment to the project? Yes _____
No _____ (fail)

| Evaluation Item | Score: | |
|---|--------|--------|
| | Max | Actual |
| 1. Professional excellence, demonstrated competence in the service to be provided, and specialized experience. | 30 | |
| 2. Demonstrated familiarity with the Nevada dam Emergency Action Plan standard (FEMA 64). | 25 | |
| 3. Staffing capability, favorable workload, and ability to meet schedules, including an assessment of the consultant's ability to add this project to their workload. | 10 | |
| 4. Past performance in terms of cost control, quality of work and compliance with performance schedules. | 5 | |
| 5. Principals to be assigned, education and experience of project manager and other personnel. | 10 | |
| 6. Nature, relevance and quality of work completed in five (5) years prior. | 10 | |
| 7. Equipment, software, etc... to complete project. | 5 | |
| 8. Other factors deemed relevant to the agreement effort. | 5 | |
| TOTAL | 100 | |

Comments:

Review Engineer

A sample contract form in PDF format (8 pages) can be viewed and printed from the Department of Administration, Purchasing Division at the following Internet address:

<http://purchasing.state.nv.us/contract.pdf>

A copy of a blank contract or this entire solicitation can be acquired from the Division of Water Resources by calling Bonnie Kordonowy at (775) 684-2800 or email at bkordonowy@water.nv.gov .